



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMUNIST STREET, PATENTS AND TRADEMARKS
Washington, D.C. 20503
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09 929,247	08 13 2001	Douglas C. Watson		8800

7590 03 13 2003

STEVEN G. ROEDER
THE LAW OFFICE OF STEVEN G. ROEDER
5560 Chelsea Avenue
La Jolla, CA 92037

EXAMINER

GURZO, PAUL M

ART UNIT	PAPER NUMBER
----------	--------------

2881

DATE MAILED: 03 13 2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/929,247

Applicant(s)

WATSON, DOUGLAS C.

Examiner

Paul Gurzo

Art Unit

2881

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 August 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: ____

DETAILED ACTION

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "26" and "28" have both been used to designate a device (reticle). There are numerous more instances of this occurring with different reference characters throughout the figures. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Itoh et al. (5,260,580).

Regarding claims 1, 11, 20, and 27, Itoh et al. teach a stage assembly and a method of making a stage assembly that moves a device an X stroke along an X axis and along a Y axis (col. 8, lines 3-13) comprising a guide base (1), a stage that retains the device (2), a Y mover that moves the stage along the Y axis, including a reaction and moving component (4 and 7), one of which uses a magnet (43₁ and 43₂ or 73₁ and 73₂) that extend along the X axis (col. 3, lines 10-28 and col. 5, line 15 - col. 6, line 29 and Fig. 2).

Art Unit: 2881

Itoh et al. do not explicitly teach the use of a conductor, but they do teach the use of an electric circuit for supplying electric current to the drive coils (41 and 71) (col. 5, lines 21-26. and Fig. 2). The examiner concludes that these coils will act as conductors because of the application of current. Further, Fig. 2 depicts a magnet length that is sufficiently long so that the magnet interacts with the conductor over the length of the X stroke. Fig. 2 also depicts a conductor length that is sufficiently long so that the conductor interacts with the magnet over the range of the X stroke. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the current driven coils for a conductor because the application of current will apply conductive properties to the coils, thus making them conductive, and functionally equivalent to a conductor.

Regarding claims 2-8, 2-17, 21-24, and 28-29, Itoh et al. depict the conductor remaining within the magnetic field throughout the entire X stroke (Fig. 2), and any slight modification of the lengths or placement of the magnet and conductor is considered obvious in light of the prior art. They also teach the exposure apparatus including the stage assembly (col. 3, lines 16-26).

Regarding claims 9-10, 18-19, 25-26, and 30-31, Itoh et al. teach an object manufactured with the exposure apparatus and a wafer on which an image has been formed (col. 3, line 64 - col. 4, line 12).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following teach a stage assembly that moves a device comprising a guide base, stage, and mover:

McKenna et al. (4,757,208)

Art Unit: 2881

Nose et al. (5,130,554)

Frey et al. (5,483,064)

Lindsay (5,654,546)

Itoh et al. (6,072,183)

Hazelton (6,271,606)

Binnard et al. (6,408,767)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Gurzo whose telephone number is (703) 306-0532. The examiner can normally be reached on M-Thurs. 7:30 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Lee can be reached on (703) 308-4116. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

PMG
February 26, 2003

A handwritten signature in black ink, appearing to be "SUT", is written over a faint, circular official stamp.